

STATEMENT OF BASIS (AI No. 42892)

for draft Louisiana Pollutant Discharge Elimination System permit No. LA0107182 to discharge to waters of the State of Louisiana.

THE APPLICANT IS: Praxair Inc.
P.O. Box 670
Westlake, LA 70669

ISSUING OFFICE: Louisiana Department of Environmental Quality (LDEQ)
Office of Environmental Services
Post Office Box 4313
Baton Rouge, Louisiana 70821-4313

PREPARED BY: Jenniffer Sheppard

DATE PREPARED: May 19, 2009

1. PERMIT STATUS

A. Reason For Permit Action:

Permit reissuance of an existing Louisiana Pollutant Discharge Elimination System (LPDES) permit for a 5-year term.

B. NPDES permit - NPDES permit effective date: NA
NPDES permit expiration date: NA
EPA has not retained enforcement authority.

C. LPDES permit - LPDES permit effective date: September 1, 2004.
LPDES permit expiration date: August 31, 2009.

D. Date Application Received: February 17, 2009

2. FACILITY INFORMATION

A. FACILITY TYPE/ACTIVITY - hydrogen purification and compression facility.

Praxair, Inc. is an existing facility that purifies and compresses the gaseous hydrogen feedstock and supplies this to customers via pipeline.

A neighboring facility, PPG Industries (LA0000761), has proposed to remediate the lower PPG Canal (a.k.a. PPG Silicas Ditch) and portions of Bayou D'Inde. As a result of the remediation activities, PPG Industries relocated their Outfall 001 from Bayou D'Inde to the Calcasieu River in March 2009. This is pertinent to Praxair Inc. since all wastewater from this facility is discharged into the PPG Canal for discharge directly to the Calcasieu River.

Statement of Basis for
Praxair Inc.
LA0107182, AI No. 42892
Page 2

Please Note: Praxair Inc.'s current LPDES permit renewal application references the following discharge location: local drainage, thence to PPG's Silica Pigment Ditch, thence to PPG Canal, thence to Bayou D'Inde. However, since PPG Industries has already moved their discharge to the Calcasieu River, the proposed permit and Fact Sheet references the new location at all outfalls.

B. FEE RATE

1. Fee Rating Facility Type: minor
2. Complexity Type: IV
3. Wastewater Type: III
4. SIC code: 2813

C. LOCATION - 3210 Pete Manena Road in Westlake, Calcasieu Parish,
Latitude 30°13'39", Longitude 93°17'48"

3. OUTFALL INFORMATION

Outfall 001

Discharge Type: treated chiller condensate, hydrogen compressor condensate, and compressor foundation stormwater.
Location: at the point of discharge from the facility, prior to entering the Parish Ditch and mixing with any other waters, at Latitude 30°13'38", Longitude 93°17'46".
Treatment: oil-water separator.
Flow: 0.0355 MGD (when discharging; this outfall is currently not operational. All wastewaters from the oily water separator are currently being piped to the surge tank for collection and discharge through Outfall 002).
Discharge Route: Parish Ditch, thence to PPG's Silica Pigment Ditch, thence to PPG Canal, thence to the Calcasieu River.
Basin/Subsegment: Calcasieu River Basin, Segment 030301.

Outfall 002

Discharge Type: cooling tower blowdown, DeOxo Condensate, and treated water from the oil-water separator (normally discharged to Outfall 001).
Location: at the point of discharge from the facility, prior to entering the Parish Ditch and mixing with any other waters, at Latitude 30°13'38", Longitude 93°17'46".
Treatment: none.
Flow: 0.0612 MGD (002) + 0.0355 MGD (001) = 0.0967 MGD.
Discharge Route: Parish Ditch, thence to PPG's Silica Pigment Ditch, thence to PPG Canal, thence to the Calcasieu River.
Basin/Subsegment: Calcasieu River Basin, Segment 030301.

Statement of Basis for
Praxair Inc.
LA0107182, AI No. 42892
Page 3

4. RECEIVING WATERS

STREAM - Calcasieu River via PPG Canal

BASIN AND SEGMENT - Calcasieu River Basin, Segment 030301

DESIGNATED USES - a. primary contact recreation
b. secondary contact recreation
c. propagation of fish and wildlife

5. PROPOSED EFFLUENT LIMITS

BASIS - See Rationale below.

Changes from previous LPDES permit:

- A. A neighboring facility, PPG Industries (LA0000761), has proposed to remediate the lower PPG Canal (a.k.a. PPG Silicas Ditch) and portions of Bayou D'Inde. As a result of the remediation activities, PPG Industries relocated their Outfall 001 from Bayou D'Inde to the Calcasieu River in March 2009. This is pertinent to Praxair Inc. since all wastewater from this facility is discharged into the PPG Canal for discharge directly to the Calcasieu River.
- B. Outfall 001 - Discharge from the oily water separator was previously piped to the cooling tower. These discharges are now piped directly to surge tank for collection and discharge through Outfall 002. Outfall 001 has been retained for possible future use.
- C. Outfalls 001 and 002 - The current LPDES permit effective on September 1, 2004 erroneously included TOC as a net value. In accordance with LAC 33:IX.2709.G.4, net credit shall be granted only if the discharger demonstrates that the intake water is drawn from the same body of water into which the discharge is made. Based on a conversation with a Praxair representative, the source water is not the same. Therefore, a 50 mg/L daily maximum limitation has been established for TOC which does not include allowances for a net value.
- D. Outfall 002 - a new requirement prohibiting the use of any additives or corrosion inhibitors containing any of the 126 priority pollutants has been added to the permit based on best professional judgment.

Statement of Basis for
Praxair Inc.
LA0107182, AI No. 42892
Page 4

6. COMPLIANCE HISTORY/COMMENTS

A compliance history/DMR review has been done covering a period from December 2003 through April 2009.

A. DMR Review/Excursions:

<u>DATE</u>	<u>PARAMETER</u>	<u>OUTFALL</u>	<u>REPORTED VALUE</u>		<u>PERMIT LIMITS</u>	
			<u>MONTHLY AVERAGE</u>	<u>DAILY MAXIMUM</u>	<u>MONTHLY AVERAGE</u>	<u>DAILY MAXIMUM</u>
4/1/05	pH	002	4.9 s.u. min	---	6.0 s.u. min	---
10/1/07	TOC	002	---	150 mg/L	---	50 mg/L
2/1/08	TRC	002	---	0.44 mg/L	---	0.2 mg/L
4/1/08	TRC	002	---	0.27 mg/L	---	0.2 mg/L

B. Inspections:

A Compliance Inspection conducted on December 16, 2003 did not reveal any areas of concern.

C. Enforcement Orders (all open orders):

Water - None

Air - None

Solid/Hazardous Waste - None

Radiation - None

7. "IT" QUESTIONS - APPLICANT'S RESPONSES

This applicant is a minor facility; therefore, "IT" Questions are not required in accordance with La. R.S. 30:2018(A).

8. EXISTING EFFLUENT LIMITS

Outfall 001

Statement of Basis for
Praxair Inc.
LA0107182, AI No. 42892
Page 5

PARAMETER(S)	MASS, LBS/DAY unless otherwise stated		CONCENTRATION, MG/L unless otherwise stated		MEASUREMENT FREQUENCY
	MONTHLY AVERAGE	DAILY MAXIMUM	MONTHLY AVERAGE	DAILY MAXIMUM	
Flow, MGD	Report	Report	---	---	Continuous, Process Calculation
TOC (net)	---	---	---	50	1/month
Oil & Grease	---	---	---	15	1/month
pH (standard units)	---	---	6.0 min	9.0 max	1/month

Outfall 002

PARAMETER(S)	MASS, LBS/DAY unless otherwise stated		CONCENTRATION, MG/L unless otherwise stated		MEASUREMENT FREQUENCY
	MONTHLY AVERAGE	DAILY MAXIMUM	MONTHLY AVERAGE	DAILY MAXIMUM	
Flow, MGD	Report	Report	---	---	Continuous, Process Calculation
TOC (net)	---	---	---	50	1/week
Oil & Grease	---	---	---	15	1/week
Total Residual Chlorine (TRC)	---	---	---	0.2	1/month
pH (standard units)	---	---	6.0 min	9.0 max	1/week
Additives	---	---	---	---	1/month, Inventory Calculation

9. ENDANGERED SPECIES

Statement of Basis for
Praxair Inc.
LA0107182, AI No. 42892
Page 6

The receiving waterbody, Subsegment 030301 of the Calcasieu River Basin is not listed in Section II.2 of the Implementation Strategy as requiring consultation with the U.S. Fish and Wildlife Service (FWS). This strategy was submitted with a letter dated November 17, 2008 from Rieck (FWS) to Nolan (LDEQ). Therefore, in accordance with the Memorandum of Understanding between the LDEQ and the FWS, no further informal (Section 7, Endangered Species Act) consultation is required. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat. Therefore, the issuance of the LPDES permit is not likely to have an adverse effect on any endangered or candidate species or the critical habitat.

10. HISTORIC SITES

The discharge is from an existing facility location, which does not include an expansion on undisturbed soils. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the "Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits" no consultation with the Louisiana State Historic Preservation Officer is required.

11. TENTATIVE DETERMINATION

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to reissue a permit for the discharge described in the application.

12. PUBLIC NOTICES

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the statement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Public notice published in:

Local newspaper of general circulation

Office of Environmental Services Public Notice Mailing List

13. STORM WATER POLLUTION PREVENTION PLAN (SWP3) REQUIREMENT

In accordance with LAC 33:IX.2707.I.3 and LAC 33:IX.2707.I.4 [40 CFR 122.44(I)(3) and (4)], a Part II condition is proposed for applicability to all storm water discharges from the facility, either through permitted

Statement of Basis for
 Praxair Inc.
 LA0107182, AI No. 42892
 Page 7

outfalls or through outfalls which are not listed in the permit or as sheet flow. For first time permit issuance, the Part II condition requires a Storm Water Pollution Prevention Plan (SWP3) within six (6) months of the effective date of the final permit. For renewal permit issuance, the Part II condition requires that the Storm Water Pollution Prevention Plan (SWP3) be reviewed and updated, if necessary, within six (6) months of the effective date of the final permit. If the permittee maintains other plans that contain duplicative information, those plans could be incorporated by reference to the SWP3. Examples of these type plans include, but are not limited to: Spill Prevention Control and Countermeasures Plan (SPCC), Best Management Plan (BMP), Response Plans, etc. The conditions will be found in the draft permit. Including Best Management Practice (BMP) controls in the form of a SWP3 is consistent with other LPDES and EPA permits regulating similar discharges of stormwater associated with industrial activity, as defined in LAC 33:IX.2511.B.14 [40 CFR 122.26(b)(14)].

14. TMDL DISCUSSION

The discharges from Praxair Inc. include treated chiller condensate, hydrogen compressor condensate, and compressor foundation stormwater (Outfall 001) and cooling tower blowdown, DeOxo condensate, and treated wastewater from the oily water separator normally discharged to Outfall 001 (Outfall 002) to local drainage, thence to PPG's Silica Pigment Ditch, thence to the PPG Canal and the Calcasieu River, Segment No. 030301. Subsegment 030301 was not listed on the Final Integrated list of impairments due to the Upper Calcasieu Estuary Toxics TMDL being issued June 13, 2002. This TMDL addressed Ammonia (as N), Copper, Mercury, Benzo(a)anthracene, and Benzo(a)pyrene.

Ammonia (as N)

The TMDL for Toxics for the Calcasieu Estuary was finalized on June 13, 2002, addressing the presence of toxic substances, including Ammonia (as N) in the watershed. The TMDL did not assign loadings to the facilities through this TMDL. However, it did require retention of limitations at existing levels if the current LPDES permit already included a limitation. The current LPDES permit issued to Praxair Inc. effective on September 1, 2004 did not include an Ammonia (as N) limitation, therefore, no additional requirements were added to this permit.

Copper, Mercury, Benzo(a)anthracene, and Benzo(a)pyrene

The discharges from Praxair Inc. are addressed in Outfalls B01 and 001 of the PPG Industries, Inc. Industrial Chemicals LPDES permit, LA0000761, effective on October 1, 2007. Therefore, the Upper Calcasieu Estuary TMDL at Subsegments 030901 (former PPG Industries discharge location) and 030301 (current location) did not include individual Waste Load Allocations (WLAs) for Praxair Inc. No additional requirements were added to this permit.

Statement of Basis for
Praxair Inc.
LA0107182, AI No. 42892
Page 8

Rationale for Praxair Inc.

1. Outfall 001 - treated chiller condensate, hydrogen compressor condensate, and compressor foundation stormwater (estimated flow is 0.0355 MGD).

PARAMETER(S)	MASS, LBS/DAY unless otherwise stated		CONCENTRATION, MG/L unless otherwise stated		MEASUREMENT FREQUENCY	REFERENCE
	MONTHLY AVERAGE	DAILY MAXIMUM	MONTHLY AVERAGE	DAILY MAXIMUM		
Flow, MGD	Report	Report	---	---	continuous	*; LAC 33:IX.2707.I.1.b
TOC	---	---	---	50	1/month	*; MSGP
Oil & Grease	---	---	---	15	1/month	*; MSGP
pH, su	---	---	6.0 (min)	9.0 (max)	1/month	*; LAC 33:IX.1113.C.1.

* Current LPDES permit, effective on September 1, 2004

MSGP Multi-Sector General Permit for Stormwater at Industrial Facilities,
LAR050000

su Standard Units

Treatment:

Oil Water Separator

Monitoring Frequency:

Flow - The continuous (process calculation) monitoring frequency has been retained from the current LPDES permit, effective on September 1, 2004.

TOC, Oil & Grease, & pH - The 1/month monitoring frequency has been retained from the current LPDES permit, effective on September 1, 2004.

Statement of Basis for
Praxair Inc.
LA0107182, AI No. 42892
Page 9

Limits Justification:

Flow - established based on LAC 33:IX.2707.I.1.b. This requirement has been retained from the current LPDES permit, effective on September 1, 2004.

TOC and Oil & Grease - daily maximum limitations of 50 mg/L for TOC and 15 mg/L for Oil & Grease have been retained from the current LPDES permit, effective on September 1, 2004. The limitations were established based on best professional judgment and are consistent with the numeric limitations established in the MSGP (Sector C) for discharges of stormwater and condensate (allowable non-stormwater discharge under the MSGP).

pH - established based on LAC 33:IX.1113.C.1. This requirement has been retained from the current LPDES permit, effective on September 1, 2004.

NOTE

For outfalls containing concentration limits, the usage of concentration limits is based on best professional judgment for similar outfalls since the flow is variable and estimated.

Statement of Basis for
 Praxair Inc.
 LA0107182, AI No. 42892
 Page 10

2. Outfall 002 - cooling tower blowdown, DeOxo Condensate, and treated water from the oil-water separator (normally discharged to Outfall 001), estimated flow of 0.0612 MGD.

PARAMETER(S)	MASS, LBS/DAY unless otherwise stated		CONCENTRATION, MG/L unless otherwise stated		MEASUREMENT FREQUENCY	REFERENCE
	MONTHLY AVERAGE	DAILY MAXIMUM	MONTHLY AVERAGE	DAILY MAXIMUM		
Flow, MGD	Report	Report	---	---	continuous	*; LAC 33:IX.2707.I.1.b
TOC	---	---	---	50	1/week	*; Outfall 001
Oil & Grease	---	---	---	15	1/week	*; Outfall 001
Total Residual Chlorine (TRC)	---	---	---	0.2	1/month	*; LCGP
pH, su	---	---	6.0 (min)	9.0 (max)	1/week	*; LAC 33:IX.1113.C.1.
Additives	---	---	---	---	1/month	*

* Current LPDES permit, effective on September 1, 2004

LCGP Light Commercial General Permit, LAG480000

su Standard Units

Treatment:

None

Monitoring Frequency:

Flow - The continuous (process calculation) monitoring frequency has been retained from the current LPDES permit, effective on September 1, 2004.

TOC, Oil & Grease, & pH - The 1/week monitoring frequency has been retained from the current LPDES permit, effective on September 1, 2004.

TRC - The 1/month monitoring frequency has been retained from the current LPDES permit, effective on September 1, 2004.

Statement of Basis for
Praxair Inc.
LA0107182, AI No. 42892
Page 11

Additives - The 1/month (inventory calculation) monitoring frequency has been retained from the current LPDES permit, effective on September 1, 2004. DMR reporting is not required.

Limits Justification:

Flow - established based on LAC 33:IX.2707.I.1.b. This requirement has been retained from the current LPDES permit, effective on September 1, 2004.

TOC and Oil & Grease - daily maximum limitations of 50 mg/L for TOC and 15 mg/L for Oil & Grease have been retained from the current LPDES permit, effective on September 1, 2004. The limitations were established based on best professional judgment due to Outfall 001 discharges being routed through this outfall. The limitations are consistent with those established at Outfall 001.

TRC - the daily maximum limitation of 0.2 mg/L has been retained from the current LPDES permit, effective on September 1, 2004. This limitation was established based on best professional judgment and is consistent with the numeric limitation established in the LCGP, Schedule E for discharges of non-contact cooling tower blowdown less than 0.100 MGD.

pH - established based on LAC 33:IX.1113.C.1. This requirement has been retained from the current LPDES permit, effective on September 1, 2004.

Additives - This requirement has been retained from the current LPDES permit, effective on September 1, 2004.

NOTE

For outfalls containing concentration limits, the usage of concentration limits is based on best professional judgment for similar outfalls since the flow is variable and estimated.